Comparison of cell wall proteins profiles from *Candida parapsilosis* clinical isolates

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Candida parapsilosis is the second most common cause of candidiasis, however there are only few studies on its biology and virulence. The major components of the cell wall of opportunistic fungal pathogen, *Candida*, are polymers of mannose covanlently associated with proteins or glycoproteins (mannoproteins), polymers of glucose (glucans) and chitin. Proteins and glycoproteins exposed in the most external layers of the cell wall structure are involved in morphogenesis and pathohenecity-related aspects, e.g. adhesion to inert materials and animal tissues. Nevertheless, the total number of cell wall proteins and their functions are still poorly known, especially in the non-Candida albicans Candida species.

In this study, cell wall proteins from seven clinical isolates of *C. parapsilosis* were extracted by boiling cell walls with SDS (sodium dodecylsulphate) and DTT (dithiothreitol). The protein extracts were firstly analysed and compared by one-dimensional SDS PAGE. The different electrophoretic profiles obtained, reveal differences between the strains under study in terms of cell wall proteins composition. However, nowadays there are more advanced and complete techniques like, two-dimensional PAGE and mass spectrometric analyses, which allow an improvement on the comparison and understanding of these differences. So, to further develop this work it is of major importance the implementation of these techniques.